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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,492	06/14/2001	Karlheinz Dorn	P97,1389 02	7912

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SCHIFF HARDIN, LLP
PATENT DEPARTMENT
6600 SEARS TOWER
CHICAGO, IL 60606-6473

EXAMINER
BENGZON, GREG C

ART UNIT	PAPER NUMBER
2144	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
	09/881,492	DORN ET AL.
Office Action Summary	Examiner	Art Unit	
	Greg Bengzon	2144	

— The MAILING DATE of this communication appears on th cover sheet with the correspondenc address —

Period f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 June 2001*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All   b)☒ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)   4) ☐ Interview Summary (PTO-413)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   Paper No(s)/Mail Date. _____ .
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)   5) ☐ Notice of Informal Patent Application (PTO-152)
        Paper No(s)/Mail Date _____   6) ☐ Other: _____ .

U.S. Patent and Trademark Office

PTOL-326 (Rev. 1-04)   Office Action Summary   Part of Paper No./Mail Date 20041215

DETAILED ACTION

This application has been Examined. Claims 1-13 are pending.

Priority

This application is a continuation-in-part application of Serial No. 08/833303 filed

June 27, 1997, and claims benefits of priority from said parent application.

The effective date of the subject matter described in the claims in this application

(as presented in the amended claims submitted on August 27, 2001) is June 27, 1997.

Applicant is reminded that in order for a patent issuing on the instant application

to obtain the benefit of priority based on priority papers filed in parent Application No.

08/883303 under 35 U.S.C. 119(a)-(d) or (f), a claim for such foreign priority must be

timely made in this application. To satisfy the requirement of 37 CFR 1.55(a)(2) for a

certified copy of the foreign application, Applicant may simply identify the application

containing the certified copy.

Information Disclosure Statement

The information disclosure statements (IDS) submitted on January 29, 2002 and

August 29, 2002 was filed after the mailing date of the application on June 14, 2001.

The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the

information disclosure statement is being considered by the Examiner.

Claim Objections

Claim 6 objected to because of the following informalities: Claim 6 references

ATOMIC standard. The Applicant does not indicate what the acronym ATOMIC

represents. The Examiner objects to the use of the modifier word 'standard' , as the

word connotes something that is well known to the general public. Appropriate

correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112: .

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the Applicant regards as his invention.

Claims 2-4,6,10 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

Applicant regards as the invention.

With respect to Claims 2,3,4, and 10, the claims refer to OLE Automation

Interface, OLE Automation Standard, Automation Interface, Custom Controls and

Microsoft OCX. The Examiner interprets these terms, and associate these terms, with

Microsoft software products, as described in the Applicant's specification.

The Applicant is respectfully reminded that, where a trademark or trade name is

used in a claim as a limitation to identify or describe a particular material or product, the

claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See

Ex parte Simpson, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain

since the trademark or trade name cannot be used properly to identify any particular

material or product. A trademark or trade name is used to identify a source of goods,

and not the goods themselves. Thus, a trademark or trade name does not identify or

describe the goods associated with the trademark or trade name.

With respect to Claim 6, the claim refers to the 'ATOMIC standard' without

specifying the actual meaning of the acronym and sufficiently disclosing the features of

said standard. The claim language is deemed to contain idiomatic English, as the

phrase 'ATOMIC standard' is used , words that connote something that is well known

or heavily-used by the general public, a connotation which the Examiner has found to

be inaccurate.

The Applicant is respectfully reminded that, where a trademark or trade name is

used in a claim as a limitation to identify or describe a particular material or product, the

claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See

Ex parte Simpson, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain

since the trademark or trade name cannot be used properly to identify any particular

material or product. A trademark or trade name is used to identify a source of goods,

and not the goods themselves. Thus, a trademark or trade name does not identify or

describe the goods associated with the trademark or trade name.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5, 7, 9-13 are rejected under 35 U.S.C. 103(a) as being anticipated by

Mason et al. (US Patent 5668998), hereinafter referred to as Mason, in view of

Christensen et al. (US Patent 5881230), hereinafter referred to as Christensen.

With respect to Claim 1, Mason discloses a medical system architecture,

comprising: a modality for acquiring images, a means for processing the images, said

means for processing includes a digital image system with a computer that works

according to a standard for an object association method for data exchange between

various application programs with graphical control elements and a standard for object

association controls, wherein a standard for object association software component is

allocated to every individual process limited by address space boundaries; including

means for expanding the standard for object association software components with a

remote control component for asynchronous communication so that devices and

processes can be remote controlled without any limitations caused by address space or computer boundaries; and a means for the transmission of the images. (Mason Column 1 Lines 35-55, Column 2 Lines 20-35, Column 4 Lines 20-65, Column 5 Lines 1-65, Column 7 Lines 1-15, Column 7 Lines 30-45, Column 11 Lines 30-45)

With respect to Claim 9, Mason discloses a medical system architecture according to claim 1, wherein said means for transmitting uses for data exchange the standard for object association. (Column 4 Lines 20-65, Column 5 Lines 1-65)

With respect to Claim 11, Mason discloses a medical system architecture according to claim 1, further comprising: means for use of software component technology for producing components for graphic user interfaces contained within a process. (Column 7 Lines 1-15)

However Mason does not disclose any teachings regarding the following claims.

With respect to Claim 1, Mason does not disclose a medical system architecture including means for expanding the standard for object linking and embedding custom controls software components.

With respect to Claims 2, Mason does not disclose a medical system architecture according to claim 1, wherein said remote control component is an OLE Automation interface.

With respect to Claim 3, Mason does not disclose a medical system architecture according to claim 2, wherein the remote control ensues according to an OLE Automation standard.

With respect to Claim 4, Mason does not disclose a medical system architecture according to claim 1, wherein the remote control component is an Automation Interface component.

With respect to Claim 5, Mason does not disclose a medical system architecture according to claim 1, wherein the remote control ensues with software-IC connections.

With respect to Claim 7, Mason does not disclose a medical system architecture according to claim 5, wherein the remote control component is a connectable/remote interface component.

With respect to Claim 9, Mason does not disclose a medical system architecture according to claim 1, wherein said means for transmitting uses for data exchange the standard for object linking and embedding.

With respect to Claim 10, Mason does not disclose a medical system architecture according to claim 1, wherein a standard for said standard for object linking and embedding Custom Controls is the component standard Microsoft OCX.

With respect to Claim 12, Mason does not disclose a medical system architecture according to claim 1, further comprising: means for combining software component technology with standard for object linking and embedding Automation for distributed propagation of an event within a control level and between the control levels.

With respect to Claim 13, Mason does not disclose a medical system architecture according to claim 1, further comprising: means for combining software component technology with software-IC connections for the distributed propagation of an event within a control level and between the control levels.

Christensen discloses a system architecture for remote automation of object oriented applications, including: a modality for acquiring images, a means for processing the images, said means for processing includes a digital image system with a computer that works according to a standard for object linking and embedding method for data exchange between various application programs with graphical control elements and a standard for object linking and embedding custom controls, wherein a standard for object linking and embedding custom controls software component is allocated to every individual process limited by address space boundaries, means for expanding the standard for object linking and embedding custom controls software components with a remote control component for communication so that devices and processes can be remote controlled without any limitations caused by address space or computer boundaries, and a means for the transmission of the images. (Figures 4-7B, Column 2 Lines 30-65, Column 5 Lines 45-55, Column 7 Lines 10-35, Column 9 Lines 55-65)

With respect to Claims 2, Christensen discloses a system architecture according to claim 1, wherein said remote control component is an OLE Automation interface. (Figures 4-7B, Column 3 Lines 15-20)

With respect to Claim 3, Christensen discloses a system architecture according to claim 2, wherein the remote control ensues according to an OLE Automation standard. (Figures 4-7B , Column 12 Lines 55-65)

With respect to Claim 4, Christensen discloses a system architecture according to claim 1, wherein the remote control component is an Automation Interface component. (Figures 4-7B ,Column 2 Lines 30-55, Column 7 Lines 10-35, Column 12 Lines 35-65)

With respect to Claim 5, Christensen discloses a system architecture according to claim 1, wherein the remote control ensues with software-IC connections. (Column 12 Lines 35-65)

With respect to Claim 7, Christensen discloses a system architecture according to claim 5, wherein the remote control component is a connectable/remote interface component. (Column 9 Lines 55-65, Column 10 Lines 1-65)

With respect to Claim 9, Christensen discloses a system architecture according to claim 1, wherein said means for transmitting uses for data exchange the standard for object linking and embedding. (Figures 4-7B ,Column 10 Lines 1 –65)

With respect to Claim 10, Christensen discloses a medical system architecture according to claim 1, wherein a standard for said standard for object linking and embedding Custom Controls is the component standard Microsoft OCX. (Column 10 Lines 1-65, Column 12 Lines 55-65))

With respect to Claim 11, Christensen discloses a system architecture according to claim 1, further comprising: means for use of software component technology for producing components for graphic user interfaces contained within a process. (Column 12 Lines 1-65)

With respect to Claim 12, Christensen discloses a system architecture according to claim 1, further comprising: means for combining software component technology with standard for object linking and embedding Automation for distributed propagation of an event within a control level and between the control levels. (Column 13 Lines 1-65)

With respect to Claim 13, Christensen discloses a system architecture according to claim 1, further comprising: means for combining software component technology with software-IC connections for the distributed propagation of an event within a control level and between the control levels. (Column 13 Lines 1-65)

Mason and Christensen are analogous art because they present concepts and practices regarding association, communication, acquisition, processing, formatting and presentation of remotely distributed objects such as digital images residing over a variety of devices having different formatting or storage standards. It is respectfully suggested that at the time of the invention it would have been obvious to a person of ordinary skill in the art to implement the teachings of Christensen regarding object linking and imbedding and remote automation into the system of Mason . The suggested motivation for doing so would have been overcome the following limitations the system of Mason , as described by Christensen (Column 1 Lines 60-65, Column 2 Lines 1-30, Column 7 Lines 10-35, Column 13 Lines 1-65): 1) allow object references to objects on remote computers, and 2) to allow for a 3-tiered architecture that provides the ability to support a conceptual layer of business logic between the

traditional 2-tier components of the client user interface and a server database.

Christensen explains as follows:

> There are several problems associated with the existing OLE proxy/OLE channel/OLE stub model to maintain an object reference for client/server object applications that do not share memory. The OLE channel is not capable of sending information between client and server processes on different computers. In a distributed computing environment, client and server applications are typically located on different computers; therefore a client application cannot contain an object reference to a server application running on a remote computer. There is also no way to maintain object identity if an object reference was passed from a client object application to a remote server object application on a remote computer since object references are not known outside the local computer. This limits the ability of software developers to write distributed object applications using existing OLE and other object oriented frameworks.

> The OLE proxy/OLE channel/OLE stub model also limits the ability of developers to create anything more than traditional two-tier client/server applications. If a client application could contain references to more than one remote server application (i.e., on one or more remote computers), then three-tier, four-tier, and potentially N-tier client/server layering could be accomplished. Three-tier client/server object layering is desirable for many business applications (e.g., a first tier providing user services, a remote second tier providing business services, and a remote third tier providing data services).

Therefore it would have been obvious to combine the teachings of Christensen into the system of Mason in order to arrive at the invention as described in Claims Claims 1-5, 7, 9-13.

Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being anticipated by Mason et al. (US Patent 5668998), hereinafter referred to as Mason, in view of Christensen et al. (US Patent 5881230), hereinafter referred to as Christensen.

With respect to Claim 6, the combined teachings of Mason and Christensen , when applied together, substantially disclose the medical system architecture according to claim 1, wherein the remote control ensues according to the ATOMIC standard. The Examiner notes that Mason and Christensen have overlapping disclosures on related subject matter regarding the ATOMIC standard, as presented below.

For the purposes of this Examination, the ATOMIC standard is interpreted by the Examiner to mean an Asynchronous Transport Optimizing observer-pattern-like system supporting several Modes for an Interface-Definition-Less Communication subsystem, as described by the Applicant in US patent application 08/676859 (issued as US Patent 6275871).

The Examiner notes that the ATOMIC system is a location and protocol transparent object oriented communication system that implicity encodes and decodes transferred data, if the connected peers reside on hosts with different internal data representation. (See Christensen Column 10 Lines 20-35; See Mason Column 8 Lines 1-25) In said ATOMIC system, the communication endpoints that use the same address – a character string (also called 'pattern') – are logically connected. (See Christensen Column 7 Lines 10-45, Column 8 Lines 45-65, Column 9 Lines 1 – 40; see Mason Column 4 Lines 20-25) The ATOMIC system supports two

communication modes – an event propagation mode (PUSH mode and PULL modes)

and a classic client/server mode using RPC. (See Christensen Column 10 Lines 50-

65; See Mason Column 2 Lines 25-65, Column 6 Lines 15-25).

The ATOMIC system uses hook routines, (supplier side and consumer side) and

macros to create a subset of data members that are to be transferred, and to effect data

conversion between both endpoints. Mason describes the use of user handlers and

provider handlers called Service Class User (SCU) and Service Class Provider (SCP),

respectively. Mason discloses of DTInitConfig, DTUserHandler, DTServiceInterface,

DTSProviderHandler that are very similar to the ATOMIC DECLARE_MSC and

IMPLEMENT_MSC Macros. Mason discloses of checking rules and creating element

lists for data transfer requests. (see Mason Column 6 Lines 1-10, Column 7 Lines

50-65, Column 8 Lines 1-65, Column 9 Lines 1-65, Column 10 Lines 1-65).

Christensen describes the use of RA Proxy Object, RA Stub Object, OLE Proxy

Object, and OLE Stub Object in the context of Remote Automation applications

(Christensen Figures 4-7B). Christensen discloses of 'marshalling' to effect data

conversion, byte swapping to conform to another CPU format, resolving local

references, and handling pointers. (see Christensen Column 10 Lines 25-45, Column

11 Lines 1-65).

With respect to Claim 8, the combined teachings of Mason and Christensen , when applied together, substantially disclose a medical system architecture according to Claim 6, wherein the remote control component is a connectable/remote interface component. (Column 9 Lines 55-65, Column 10 Lines 1-65)

However Mason does not disclose the concept of process threads and reference threads in the context of object linking and embedding.

Christensen discloses that a reference thread is established to resolve all references to remote objects on the remote server computer. The common reference thread eliminates the complicated object lookup from multiple reference threads. (Figure 3, Column 11 Lines 50-65)

Mason and Christensen are analogous art because they present concepts and practices regarding association, communication, acquisition, processing, formatting and presentation of remotely distributed objects such as digital images residing over a variety of devices having different formatting or storage standards. It is respectfully suggested that at the time of the invention it would have been obvious to a person of ordinary skill in the art to implement the teachings of Christensen regarding process threads and reference threads into the system of Mason . The suggested motivation for doing so would have been overcome the following limitations the system of Mason and

also increase the speed and efficiency of Remote Automation, as described by

Christensen (Column 1 Lines 60-65, Column 2 Lines 1-30, Column 7 Lines 10-35,

Column 11 Lines 60-65, Column 13 Lines 1-65). The combination of Mason and

Christensen will 1) allow object references to objects on remote computers, and 2)

allow for a 3-tiered architecture that provides the ability to support a conceptual layer

of business logic between the traditional 2-tier components of the client user interface

and a server database: Christensen explains as follows:

> There are several problems associated with the existing OLE proxy/OLE
> channel/OLE stub model to maintain an object reference for client/server object
> applications that do not share memory. The OLE channel is not capable of
> sending information between client and server processes on different computers.
> In a distributed computing environment, client and server applications are
> typically located on different computers; therefore a client application cannot
> contain an object reference to a server application running on a remote
> computer. There is also no way to maintain object identity if an object
> reference was passed from a client object application to a remote server object
> application on a remote computer since object references are not known outside
> the local computer. This limits the ability of software developers to write
> distributed object applications using existing OLE and other object oriented
> frameworks.

> The OLE proxy/OLE channel/OLE stub model also limits the ability of
> developers to create anything more than traditional two-tier client/server
> applications. If a client application could contain references to more than
> one remote server application (i.e., on one or more remote computers), then
> three-tier, four-tier, and potentially N-tier client/server layering could be
> accomplished. Three-tier client/server object layering is desirable for many
> business applications (e.g., a first tier providing user services, a remote
> second tier providing business services, and a remote third tier providing data
> services).

Therefore it would have been obvious to combine the teachings of Christensen

into the system of Mason in order to arrive at the invention as described in Claims

Claims 6 and 8.

Conclusion

The prior art made of record and not relied upon is considered pertinent to

Applicant's disclosure. Please refer to the enclosed PTO-892 form.

Any inquiry concerning this communication or earlier communications from the

Examiner should be directed to Greg Bengzon whose telephone number is (571) 272-

3944. The Examiner can normally be reached on Mon. thru Fri. 8 AM - 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's

supervisor, William Cuchlinski can be reached on (571)272-3925. The fax phone

number for the organization where this application or proceeding is assigned is 703-

872-9306.

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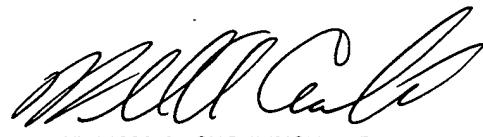
WILLIAM A. CUCHLINSKI, JR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800